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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,842	09/25/2003	Michael D. Brookshire	121236.00003	9648

26707 7590 08/25/2005

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EXAMINER
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REESE, DAVID C

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/671,842	BROOKSHIRE, MICHAEL D.	
	Examiner	Art Unit	
	David C. Reese	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 6, 8-12, 17, 19-22, 26 and 28-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 13-16, 18, 23-25 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Status of Claims***

[1] Claims 6, 12, 17, 26, 32-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected method and species, there being no allowable generic or linking claim. Applicant elected, without traverse, the restriction requirement in the reply filed on 7/29/2005. Also, examiner agrees that since claims 36-39 were dependent upon the method claims (group II), they are thus part of group II as well; and are therefore understood to be withdrawn and will not be examined to their merits.

The examiner does not agree, however, with the selection of relevant claims selected as a result of the species selected. In the reply filed on 7/29/2005, the applicant selected species I, regarding Figures 2-5. In addition, the applicant stated that such a species and figures were relevant to claims 1-5, 7-11, 13-16, 18-25, and 27-31 of the instant application. Upon reviewing said claims, however, it has become apparent that some of the above claims are not readable upon the selected species and/or figures. First and foremost, that from Fig. 5 (from elected species I, Figs. 2-5) only shows 5 distinct rows or sets of facets, not up to six as claimed in claims 8, 10, 19, 21, 28, 30 and not up to eleven set of facets as stated in Claim 9, 11, 20, 22, 29, and 31. As a result, the above claims will not be examined to their merits.

The requirement is still deemed proper and is therefore made FINAL.

### ***Drawings***

[2] The drawings are objected to under 37 CFR 1.83(a) because they fail to show 44 as described in the specification. It also appears from Fig. 5 that 46 are the third set of facets, and

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48 is the fourth set of facets, as opposed to what is currently disclosed in the specification.

Correction may be needed to input 44 and shift up the corresponding numbers as a result. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

[3] The disclosure is objected to because of the following informalities:

Please see the above regarding diagrams, as that disclosed in paragraph [00028] does not match up with that shown in Fig. 5.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

[4] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[5] Claims 1, 3-5, 13, 16, 23 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Meyer, US- 250,378, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

The shape and appearance of Meyer is identical in all material respects to that of the claimed design, *Hupp v. Siroflex of America Inc.*, 122 F.3d 1456, 43 USPQ2d 1887 (Fed. Cir. 1997).

As for Claim 1, Meyer teaches of a diamond, comprising:

a pavilion (Fig. 3) having a plurality of facets disposed from a girdle to a culet; and

a dome-shaped crown (A) disposed above the girdle, wherein the dome-shaped crown

(A) has sets of facets cut with monotonically decreasing angles to form a stepped contour from the girdle to an apex of the dome-shaped crown (A) (In Fig. 5, one can notice the different sets of

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facets of the crown and how the angle of each set of facets decreases as you move towards the apex of the crown, giving a dome-shaped crown).

Re: Claim 4, wherein the plurality of facets of the pavilion totals at least sixteen in number (Fig. 3).

Re: Claim 5, wherein the pavilion is substantially conical in shape (Fig. 3).

As for Claim 13, Meyer teaches of a cut gemstone, comprising:

a pavilion (Fig. 3) extending from a girdle to a culet; and

a crown (A) having a first set of facets disposed above the girdle and a second set of facets disposed between the first set of facets and an apex of the crown, wherein the first set of facets is cut a first angle with respect to a reference line which is tangential to the apex of the crown and the second set of facets is cut at a second angle with respect to the reference line which is less than the first angle (In Fig. 5, one can notice the different sets of facets of the crown and how the angle of each set of facets decreases as you move towards the apex of the crown).

Re: Claim 16, wherein the plurality of facets of the pavilion totals at least sixteen in number (Fig. 3).

As for Claim 23, Meyer teaches of a cut gemstone, comprising:

a pavilion (Fig. 3) having a plurality of facets disposed from a girdle to a culet; and

a dome-shaped crown (A) disposed above the girdle, wherein the dome-shaped crown has (A) a stepped contour from the girdle to an apex of the dome-shaped crown (A) (In Fig. 5, one can notice the stepped contour as you move towards the apex of the dome-shaped crown).

***Claim Rejections - 35 USC § 103***

[6] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[7] Claims 2-3, 14-15, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer, US- 250,378, in view of Freiesleben US-5,657,647.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 2, Meyer teaches that of Claim 1.

The difference between the claim and Meyer is the claim recites: wherein each of the plurality of facets of the pavilion are symmetrically disposed and extend continuous from the girdle to the culet. Freiesleben discloses a gemstone similar to that of Meyer. In addition, Freiesleben further teaches of a plurality of facets of the pavilion are symmetrically disposed and extend continuous from the girdle to the culet (Fig. 4A). It would have been obvious to one of ordinary skill in the art, having the disclosures of Meyer and Freiesleben before him at the time the invention was made, to modify the pavilion of Meyer to include a different design, as in Freiesleben. One would have been motivated to make such a combination because one would be

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interested in achieving that exact design of pavilion, as well as increasing the aesthetics of the gemstone.

Re: Claim 3, Freiesleben discloses wherein the plurality of facets of the pavilion are each cut to an angle of about 40.75 degrees (col. 1, line 64).

Re: Claim 14, Freiesleben discloses wherein each of the plurality of facets of the pavilion are symmetrically disposed and extend continuous from the girdle to the culet (Fig. 4A).

Re: Claim 15, Freiesleben discloses wherein the plurality of facets of the pavilion are each cut to an angle of about 40.75 degrees (col. 1, line 64) with respect to the reference line.

Re: Claim 24, Freiesleben discloses wherein each of the plurality of facets of the pavilion are symmetrically disposed and extend continuous from the girdle to the culet (Fig. 4A).

Re: Claim 25, Freiesleben discloses wherein the plurality of facets of the pavilion are each cut to an angle of about 40.75 degrees (col. 1, line 64) with respect to the reference line which is tangential to the apex of the dome-shaped crown.

**[8]** Claims 7, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer, US- 250,378.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claims 7, 18, and 27, Meyer teaches of that from claims 1, 13, and 23.



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The difference between the claim and Meyer is that Meyer does not expressly disclose the exact angles of the sets of facets. The examiner takes official notice that exact angles are considered to be a design choice by the artisan cutting the stone. Depending on the shape and size of the gemstone, the angles at which the facets are cut into the stone will make the stone more precious and brilliant. Therefore, it would have been obvious to have cut the sets of facets at the specific angles for each of the sets of facets into the crown of the gemstone in order to increase the brilliance of the gemstone to make it more aesthetically pleasing to the wearer of the gemstone.

### *Conclusion*

[9] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited further to show the state of the art with respect to this particular type of jewel; as well as their extreme relevance to the current application as many read extensively onto the claimed invention: please see submitted notice of reference cited.


[10] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. **Please also note the change in the fax phone number to (571) 273-8300 for the organization where this application or proceeding is assigned.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sincerely,  
David Reese  
Assistant Examiner  
Art Unit 3677

DCR

  
ROBERT J. SANDY  
PRIMARY EXAMINER